

## Abstract

The present invention relates to an olefin derived copolymer and a thermoplastic resin composition using the olefin derived copolymer satisfying the following (1) and (2): (1) tensile strength at break measured based on JIS K6251 is 2.0 or less MPa; and (2) tensile elongation at break EB (%) of a resin composition obtained satisfies the following relational expression (expression 1) and (expression 2), when blended with a polypropylene derived resin that has 20 degree C xylene soluble component of not more than 20 wt%.

$$R[3/5] - R[2/6] \geq 0.15 \quad \text{--- (expression 1)}$$

$$S[2/6] \geq -800 \quad \text{--- (expression 2)}$$

(R [3/5] and R [2/6] are obtained by the following methods: a curve is obtained by plotting tensile elongation at break EB (%) (based on JISK6251) of resin composition taken as vertical axis, and weight part rate Pa of a content of an olefin derived copolymer contained in a resin composition taken as horizontal axis; a multiple regression curve in section regions of Pa = 0.30 - 0.50 and Pa = 0.20 - 0.60 (Pa represents content weight percentage of an olefin derived copolymer contained in a resin composition) of a multiple regression expression obtained by quintic multiple regression of the curve is obtained; R [3/5] and R [2/6] are defined as multiple correlation coefficients of a primary straight line obtained by approximating of the multiple regression curve by method of least squares. S [2/6]

represents a gradient of a primary straight line (expression) obtained by approximating the above-mentioned multiple regression curve by a method of least squares in section region of  $P_a = 0.20 - 0.60$ . In addition, in the above-mentioned multiple regression expression, it is indispensable that data at least seven points  $P_a = 0.00, 0.20, 0.30, 0.40, 0.50, 0.60$  and  $0.70$  are contained. Furthermore, when data at points of number beyond above case are contained, it is indispensable that total  $P_a$  values exist at  $0.10$  or less of fixed interval mutually.